

# BUFFALO LAKE Management Team

PARLBY CREEK-BUFFALO LAKE WATER MANAGEMENT PROJECT

## INFORMATION UPDATE

JUNE 1995

### Message from the Chairman

#### Stabilization Project Update

On behalf of the Buffalo Lake Management Team, it is my pleasure to provide you with an update on the Buffalo Lake Stabilization Project.

As I write, the last piece of pipeline from the pumphouse to Alix Lake is under construction and should be complete by August 1995. After the pipeline completion, we hope to commission the pumps. This will involve starting the pumps and running them for a maximum 30 days to verify the installation, operation and warranty.

Once the pumps are commissioned, pumping in earnest is planned to start sometime in the 1996 season.

To date, project phases have been completed on or ahead of schedule and under budget. This has happened because of the diligent work done by the management team and the excellent handling of the engineering and construction by Alberta Environmental Protection people.

The backflooding of agricultural haylands and the filling of Spotted Lake for fish spawning have not been without problems, but once there is a stable flow of water from the pumps most of the problems will be corrected. Surveying of the perimeter of Buffalo Lake is complete. The level take lines are mapped and in place.

The North American Waterfowl Management Plan, in partnership with, Ducks Unlimited will manage and control the Rochling Bay Rider Lake wildlife area.

If there are any concerns or questions, please contact one of the management team.

#### Construction Update

##### **Parlby Creek**

- All works between Highway #50 and the Town of Alix are now complete. Backflood operations in the area were successfully carried out in spring 1985.

##### **Red Deer River To Alix**

- All components of the diversion system from the Red Deer River to Alix Lake are either under construction or otherwise complete.
- The pumphouse at the Red Deer River will be commissioned during the fall of 1995, and be ready to operate by spring 1996.
- The steel pipeline contract initiated during the late fall 1994 is presently under construction and scheduled to be completed by August 1995.
- The open channel and conduit crossing sections of the channel from Lake C to Alix Lake will be completed by July 1995.
- The landscape restoration maintenance contract for the Alix Lake Control Structure and park will carry on through the 1995 growing season.





*Present construction activities on the pipeline phase*

## **Tourism and Recreation Update**

We are continuing to review Tourism and Recreational data of the greater Buffalo Lake area. As Buffalo Lake is the largest body of water south of Edmonton, it is fast becoming a major destination, vacation spot. The benefits to the surrounding communities are becoming increasingly apparent as travelers purchase food(s), gasoline and other amenities.

Archaeological research, conducted since the 1970s, has opened a page of the past in identifying the movement and settlement of Metis groups. A village on the south shore of Buffalo Lake may have supported a population of over 1,500 people at one time.

Ecotourism is one of the most sought after tourism experiences of the 1990s. What is 'ecotourism'? The Canadian Environmental Advisory Council has defined it as 'a nature experience that contributes to the conservation of the ecosystem'. This type of ecologically responsible tourism appeals to growing numbers of Albertans.

Buffalo Lake is unique in its waterfowl habitats and native settlements. Working closely with the Fish and Wildlife Subcommittee will ensure that the ecotourism component will be there for future generations.

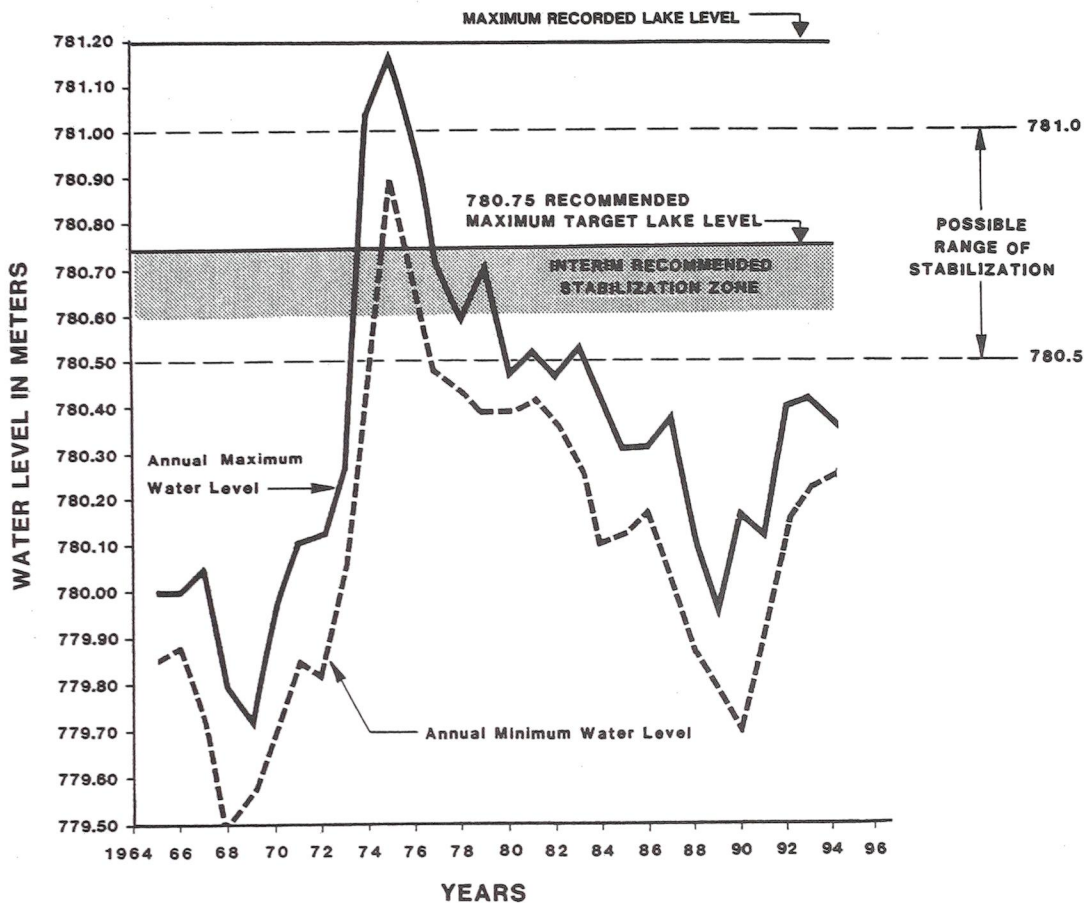
## **Fish and Wildlife Report**

Work continues on issues affecting the fish and wildlife resources of Buffalo lake.

The Tail Creek outlet area contains valued wetlands and wildlife habitat. We continue to look for alternatives which will meet the lake outlet requirements without destroying the Tail Creek wetlands.

Committee members are currently focusing on the enhancement of the Buffalo Lake Pike Fisheries. The management of water levels in Spotted Lake (the key spawning area) is viewed as a critical issue. The goal will be to ensure that the lake water level management is synchronized with the biological requirements of the pike. A fundamental requirement is to have the pike fingerlings reach approximately 75 mm in size before the Spotted Lake drawdown occurs. Fisheries biologists report that significant improvements in fish stocks will result when management principles are adhered to.

Biologists continue to track a number of pike that were fitted with transmitters last year. This information will be of significant value in accessing the movement of fish through the Parlbay Channel and through the fishways currently operating on the structures in the channel. Results from this work should be available by late summer.



## BUFFALO LAKE WATER LEVELS

### Land Assembly

Alberta Environmental Protection has completed the legal surveys of the proposed acquisition takeline of elevation 781.2. Negotiations for the requisition of this requirement is scheduled to begin shortly.



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## ***How can the lake be stabilized?***

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The Buffalo Lake Management Team has a number of sub-committees including water quality and quantity, tourism and recreation, fish and wildlife, land use, and agriculture. Using the findings of past studies and balancing the needs of the various sub-committees, the Management Team has proposed an interim stabilization zone. The team proposes an operating water level for Buffalo Lake of between 780.6 metres and 780.75 metres.

Depending on the amount of water available from the Red Deer River, water would be pumped at a maximum rate of 1.43 cubic metres per second (50 cubic feet per second) via Parlbay Creek from the Red Deer River to Buffalo Lake. When the lake level reaches 780.75 metres, pumping would stop until levels drop below 780.50 metres. The team recommends that the maximum level be reached by early July, to benefit recreation activities on the lake.

Water management goals for Buffalo Lake are aimed at maintaining the natural ecological process, which includes:

- annual evaporation drawdown
- occasional flooding of the upper shoreline contours
- stabilization levels that fall within the natural water levels and are well below maximum historic levels.

Water levels on Buffalo Lake will continue to be dictated primarily by natural events such as rainfall, snowfall and temperature. Pumping will only have a minor influence.

Water level information can be obtained directly from either Environment Canada in Calgary (292-5402) or Alberta Environmental Protection in Edmonton (427-6279).

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## ***How can I learn more about the stabilization zone?***

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For the convenience of local residents, special markers have been set up along the shoreline to allow you to see the actual target lake levels. As well, contour maps are being displayed to show how much area the lake will cover at the target zones.

These contour maps are found at the following locations:

- Rochon Sands Community Hall
- Old McDonald's Farm office
- White Sands - adjacent to the summer village workshop on Lakeview Drive
- Pelican Point store
- Pelican Point Country Campground office
- Bashaw Golf Course office

We encourage you to review the contour maps and the water level markers and provide your comments to the Buffalo Lake Management Team. (Brief questionnaires are available at the display sites.) These comments will be used by the team in preparing final recommendations to the Alberta Government.

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## ***How do I get further information?***

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We invite you to contact members of the Buffalo Lake Management Team if you have questions about our interim recommendation or any of our activities.

Angus Braseth (Chairperson) ..... 372-3662  
Neil Miller ..... 782-3301  
Frances Sargeant ..... 788-3785 / 788-3087  
Roy Willard ..... 372-2115  
Linda Walton ..... 788-2211

John Lund ..... 747-2438  
Adrian van Nieuwkerk ..... 788-3077  
Ray Kerber ..... 340-5310  
Kim Schmitt ..... 342-1314  
Karl Grollmuss ..... 742-1801 / 275-7762